

WE CLAIM

1. A method of translating a set of transmission parameters related to a first transmission
protocol from said first transmission protocol to a second transmission protocol for a data
element being sent on a connection from a first communication network utilizing said first
5 transmission protocol to a second communication network utilizing said second transmission
protocol, said method comprising:

mapping a first parameter from said set of transmission parameters to a class of service
value for said connection; and

mapping said class of service value and a second parameter from said set of transmission
10 parameters to another parameter for said second transmission protocol.

2. A method of translating a set of transmission parameters as claimed in claim 1, wherein
said first parameter is a quality of service parameter for said connection in said first
communication network and said second parameter is a priority rating for said data element.

3. A method of translating a set of transmission parameters as claimed in claim 2, further
15 comprising:

converting said data element of said connection from at least one first data element
associated with said first transmission protocol to a second data element
associated with said second transmission protocol; and

associating said value of said another transmission parameter with said second data
20 element.

4. A method of translating a set of transmission parameters as claimed in claim 3, wherein said second parameter indicates drop precedence and said another transmission parameter indicates a quality of service provisioning for said connection in said second communication network and drop precedence for said second data element.

5 5. A method of translating a set of transmission parameters as claimed in claim 4, wherein said second communication network is an MPLS network, said second transmission protocol is a MPLS transmission protocol and said second data element is a MPLS frame.

6. A method of translating a set of transmission parameters as claimed in claim 5, wherein said first communication network is an ATM network, said first transmission protocol is an ATM transmission protocol and each of said at least one first data element is an ATM cell.

7. A method of translating a set of transmission parameters as claimed in claim 6, wherein said MPLS frame is provided to said MPLS network for transmission through a label switched path and said value of said another transmission parameter is inserted in an experimental field of said MPLS frame.

15 8. A method of translating a set of transmission parameters as claimed in claim 7, wherein said first parameter includes at least one of ATM service category, cell loss ratio and cell delay variation.

9. A method of translating a set of transmission parameters as claimed in claim 8, wherein said value of said drop precedence of said at least one ATM cell utilizes a value of drop
20 precedence for said each of said at least one ATM cell.

10. A method of translating a set of transmission parameters as claimed in claim 9, wherein said label switched path is an experimental inferred per hop behaviour label switched path (E-LSP).

11. A method of translating a set of transmission parameters as claimed in claim 3, wherein
5 said second communication network is an MPLS network, said second transmission protocol is a MPLS transmission protocol, said second data element is a MPLS frame said first communication network is an ATM network, said first transmission protocol is an ATM transmission protocol, each of said at least one first data element is an ATM cell, said second parameter indicates drop precedence for said ATM cell, said another transmission parameter indicates drop precedence for said MPLS frame, said MPLS frame is provided to said MPLS network for transmission through a label inferred per hop behaviour label switched path (L- LSP) and said value of said another transmission parameter is inserted in an experimental field of said MPLS frame.

12. A translation module of a network element, said translation module translating a set of
15 transmission parameters related to a first transmission protocol from said first transmission protocol to a second transmission protocol for a data element being sent on a connection from a first communication network utilizing said first transmission protocol to a second communication network utilizing said second transmission protocol, said network element connected to said first communication network and said second communication network, said
20 network element receiving said data element from said first communication network and communicating said data element to said translation module, said network element transmitting

said data element from said network element over said second communication network after translation of said set of transmission parameters, said translation module comprising:

a first sub-module mapping a first parameter from said set of transmission parameters to a class of service value for said connection; and

5 a second sub-module mapping said class of service value and a second parameter from said set of transmission parameters to another transmission parameter for said second transmission protocol.

13. A translation module of a network element as claimed in claim 12, wherein said first parameter is a quality of service parameter for said connection in said first communication network and said second parameter is a priority rating for said data element.

14. A translation module of a network element as claimed in claim 13, further comprising: a conversion sub-module, said conversion sub-module:

converting said data element of said connection from at least one first data element associated with said first transmission protocol to a second data element associated with said second transmission protocol; and
15 associating said value of said another transmission parameter with said second data element.

15. A translation module of a network element as claimed in claim 14, wherein said second parameter indicates drop precedence and said another transmission parameter indicates a quality
20 of service provisioning for said connection in said second communication network and drop precedence for said second data element.

16. A translation module of a network element as claimed in claim 15, wherein said second communication network is an MPLS network, said second transmission protocol is a MPLS transmission protocol and said second data element is a MPLS frame.

17. A translation module of a network element as claimed in claim 16, wherein said first communication network is an ATM network, said first transmission protocol is an ATM transmission protocol and each of said at least one first data element is an ATM cell.

18. A translation module of a network element as claimed in claim 17, said translation module further comprising:

a MPLS card, said MPLS card containing said second sub-module and said conversion sub-module of said translation module; and

a control complex connected to said MPLS card, said control complex providing management for said network element, said control complex containing said first sub-module of said translation module;

wherein said network element includes an ATM card, said ATM card providing an interface for said ATM network, said ATM card receiving said at least one ATM cell from said ATM network and communicating said at least one ATM cell to said translation module, said ATM card is a line card, said MPLS card is a line card, said MPLS card providing an interface for said MPLS network and said MPLS card transmitting said MPLS frame over said MPLS network.

19. A translation module of a network element as claimed in claim 18, wherein said network element transmits said MPLS frame over said MPLS network through a label switched path and

said value of said another transmission parameter is inserted in an experimental field of said MPLS frame.

20. A translation module of a network element as claimed in claim 19, wherein said first parameter includes at least one of ATM service category, cell loss ratio and cell delay variation.

5 21. A translation module of a network element as claimed in claim 20, wherein said value of said drop precedence of said at least one ATM cell utilizes a value of drop precedence for said each of said at least one ATM cell.

22. A translation module of a network element as claimed in claim 21, wherein said label switched path is an experimental inferred per hop behaviour label switched path (E-LSP).

10 23. A translation module of a network element as claimed in claim 14, wherein said second communication network is an MPLS network, said second transmission protocol is a MPLS transmission protocol, said second data element is a MPLS frame said first communication network is an ATM network, said first transmission protocol is an ATM transmission protocol, each of said at least one first data element is an ATM cell, said second parameter indicates drop
15 precedence for said ATM cell, said another transmission parameter indicates drop precedence for said MPLS frame, said MPLS frame is provided to said MPLS network for transmission through a label inferred per hop behaviour label switched path (L-LSP) and said value of said another transmission parameter is inserted in an experimental field of said MPLS frame.